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IS 826 (1980): Ammonium Sulphate, Fertilizer Grade [FAD 7: Soil Quality and Gertilizers]



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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

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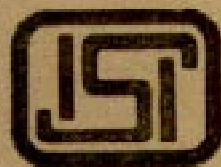
“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
SPECIFICATION FOR
AMMONIUM SULPHATE, FERTILIZER GRADE
(*Second Revision*)

UDC 631.841.1 : 661.528.532



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN 9, BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

SPECIFICATION FOR AMMONIUM SULPHATE, FERTILIZER GRADE (*Second Revision*)

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*Shri V. R. R. Gupta was Chairman for the meeting in which this standard was finalized.

(*Continued on page 2*)

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(Continued on page 6)

AMENDMENT NO. 1 MAY 2012
TO
IS 826 : 1980 SPECIFICATION FOR
AMMONIUM SULPHATE, FERTILIZER GRADE

(Second Revision)

[Page 5, *clause 3.2(d)*] — Substitute ‘Gross and net quantity in kg’ for
‘Gross and net mass in kg.’.

(FAD 7)

Reprography Unit, BIS, New Delhi, India

Indian Standard
SPECIFICATION FOR
AMMONIUM SULPHATE, FERTILIZER GRADE
(*Second Revision*)

0. FOREWORD

0.1 This Indian Standard (Second Revision) was adopted by the Indian Standards Institution on 29 February 1980, after the draft finalized by the Fertilizers Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

0.2 This standard was first published in 1955. This was revised in 1967 and the limit for pyridine was dropped since it was of no agronomical importance. A plea for allowing higher acidity was accepted to accommodate by-product ammonium sulphate from coal distillation. Traces of arsenic in ammonium sulphate, fertilizer grade, has not been reported to effect its efficacy. However, this requirement has been retained to accommodate by-product ammonium sulphate and producers using arsenic trioxide for prevention of corrosion.

0.3 In the present revision, since separate standards on methods of sampling and test for fertilizers have been published, those details therefore have been deleted from this standard. The Sectional Committee responsible for the preparation of this standard decided to include ' formaldehyde titration method ' and ' silver diethyl dithiocarbamate method ' for determination of ammoniacal nitrogen and arsenic content respectively. These methods are being included in the revisions of Part II and Part VI of IS : 6092*. Till such time as the revisions of IS : 6092 (Part II)-1971* and IS : 6092 (Part VI)-1971* are available, the existing methods shall apply.

0.4 In the preparation of this standard consideration has been given to the need for maintaining co-ordination with the specifications of the Fertilizer (Control) Order, 1957 and the Essential Commodities Act,

*Methods of sampling and test for fertilizers:

Part II Determination of nitrogen.

Part VI Determination of impurities.

1955 of Government of India. However, this standard is subject to the provisions imposed under this Order wherever applicable.

0.5 For particle size, the use of IS sieves conforming to IS : 460 (Part I)-1978* is prescribed. Where IS sieves are not available, other standard sieves as judged from aperture size may be used.

0.6 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for ammonium sulphate, fertilizer grade. The material may also be used for other industrial purposes.

2. REQUIREMENTS

2.1 Description — The material shall be in the form of free-flowing crystals, and shall be free from extraneous material.

2.2 The material shall also comply with the requirements given in Table 1.

**TABLE 1 REQUIREMENTS FOR AMMONIUM SULPHATE,
FERTILIZER GRADE**

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST, REF TO PART AND CL NO. IN IS : 6092-1971*
(1)	(2)	(3)	(4)
i)	Ammoniacal nitrogen, percent by mass, <i>Min</i>	20.6	12 of Part II
ii)	Moisture, percent by mass, <i>Max</i>	1.0	5.1 of Part VI
iii)	Free acidity (as H_2SO_4), percent by mass, <i>Max</i>	0.025†	7 of Part VI
iv)	Arsenic (as As_2O_3), percent by mass, <i>Max</i>	0.01	8 of Part VI

*Methods of sampling and test for fertilizers:

Part II Determination of nitrogen.

Part VI Determination of impurities.

†0.04 for material obtained from by-product ammonia and by-product gypsum.

*Specification for test sieves: Part I Wire cloth test sieves (*second revision*).

†Rules for rounding off numerical values (*revised*).

3. PACKING AND MARKING

3.1 Packing — The material shall be packed in jute or multi-walled paper bags or jute bags lined with polyethylene film or in such other containers as agreed to between the purchaser and the supplier. Each bag shall be securely closed.

3.2 Marking — Each bag shall bear legibly and indelibly the following information:

- a) Name of the fertilizer;
- b) Name of the manufacturer and his recognized trade-mark, if any;
- c) Percentage of ammoniacal nitrogen by mass; and
- d) Gross and net mass in kg.

3.2.1 Each container may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

4. SAMPLING

4.1 Representative test samples of the material shall be drawn as prescribed in IS : 6092 (Part I)-1971*.

4.2 Criteria for Conformity — For declaring the conformity of the lot to the requirements of this specification, the test results on the composite sample shall satisfy all the requirements specified in 2.

5. TEST METHODS

5.1 Tests for the requirements listed under 2 shall be carried out according to the methods prescribed in IS : 6092 (Part II)-1971* and IS : 6092 (Part VI)-1971*. Reference to relevant parts and clauses is given in col 4 of Table 1.

*Methods of sampling and test for fertilizers:

Part I Sampling.

Part II Determination of nitrogen.

Part VI Determination of impurities.

(Continued from page 2)

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INDIAN STANDARDS

ON

FERTILIZERS

IS:

294-1979	Superphosphate (second revision)
326-1960	Ammonium sulphate, fertilizer grade (second revision)
333-1964	Bone-meal, raw (revised)
1013-1972	Triple superphosphate (first revision)
1014-1956	Bone-meal, steamed
1114-1964	Ammonium chloride, fertilizer grade (revised)
1304-1963	Glossary of terms used in fertilizer trade and industry (revised)
1761-1975	Urea, technical (first revision)
2256-1972	Ammonium sulphate nitrate (first revision)
2409-1971	Calcium ammonium nitrate (first revision)
2764-1960	Potassium sulphate, fertilizer grade (first revision)
2779-1960	Potassium chloride (muriate of potash), fertilizer grade (first revision)
3029-1964	Castorseed cake for fertilizer purposes
4830-1979	Ammonium phosphate sulphate, granular (first revision)
5406-1979	Urea, fertilizer grade (first revision)
5905-1971	Code of practice for handling and storage of bagged fertilizers
6092	Methods of sampling and test for fertilizers:
6092 (Part I)-1971	Sampling
6092 (Part II)-1971	Determination of nitrogen
6092 (Part III)-1971	Determination of phosphorus
6092 (Part IV)-1971	Determination of potassium
6092 (Part V)-1971	Determination of trace elements
6092 (Part VI)-1971	Determination of impurities
6448-1971	Diammonium phosphate
6661-1972	Potassium schoenite
7131-1973	Nitrophosphate based granulated fertilizers
7863-1975	Fertilizer physical mixtures
8249-1976	Zinc sulphate, agricultural grade
8359-1977	Urea ammonium phosphate based fertilizers
8358-1977	NREM cake for manuring
8559-1977	MAMUA cake for manuring
8961-1978	Chloromequat chloride, technical
8962-1978	Chloromequat chloride aqueous solution
9024-1978	Granulated fertilizer mixtures

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